

ECOLE CENTRALE DE LYON

(Public Establishment with a Scientific, Cultural and Professional character)

**METHOD AND APPARATUS FOR ASSIGNING A SOUND CLASS TO A
SOUND SIGNAL****ABSTRACT:**

The invention concerns a method for assigning at least one sound class to a sound signal, characterized in that it comprises the following steps:

- dividing the sound signal into temporal segments having a specific duration,
- extracting the frequency parameters of the sound signal in each of the temporal segments, by determining a series of values of the frequency spectrum in a frequency range between a minimum frequency and a maximum frequency,
- assembling the parameters in time windows having a specific duration greater than the duration of the temporal segments,
- extracting from each time window, characteristic components,
- and on the basis of the extracted characteristic components and using a classifier, identifying the sound class of the time windows of the sound signal.

(Figure to be published: **Fig. 1**)